

# METHOD AND APPARATUS FOR FORMING DYE SUBLIMATION IMAGES IN SOLID PLASTIC

## Abstract of the Invention

Method for forming a dye sublimation image in a substrate, particularly a plastic substrate, and apparatus to perform the method. According to the method taught by the present invention, a substrate is disposed on a perforated platen and a dye carrier having an image formed thereon of a dye sublimation ink is disposed on the substrate such that the image is in contact with the substrate. The substrate, dye carrier and at least a portion of the perforated platen are then covered with a flexible membrane. A clamping pressure is then applied to the substrate and the dye carrier through the membrane. Once the clamping pressure is attained, the substrate and dye carrier are first heated, then cooled.

The invention disclosed herein further teaches a number of novel apparatus to effect the method, resulting in significantly superior dye sublimation imaging than heretofore attainable in rigid plastic sheets.